

**Briefing: Compressed Natural Gas (CNG)**  
**Tuesday, February 27, 2018**  
**2:00 pm – Administrator's Office**

**Meeting Background**

VNG.co LLC (VNG) has come in to meet with staff from the Office of Air and Radiation (OAR) and the Office of Policy (OP). The company has also actively engaged with Congress. VNG builds compressed natural gas (CNG) fueling/infrastructure for light- and medium-duty vehicles.

**Industry Overview**

Natural gas powers more than 150,000 vehicles in the United States and roughly 15.2 million vehicles worldwide, mostly concentrated in the Asia-Pacific region and Latin America. Almost all of those natural gas vehicles (NGVs) use CNG engines. Several multinational automobile manufacturers sell CNG vehicles, including Ford, Volkswagen, GM, Honda, Nissan, Audi, and Chevrolet. Market research estimates that the global market for CNG vehicles will grow at an annual rate of 4.9% between 2017 and 2021.

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**Supplemental Materials**

- Memo providing additional analysis on industry recommendations
- Draft CNG bill to be introduced by Sen. Inhofe
- One-pager provided by VNG
- PowerPoint provided by VNG

## MEMORANDUM

### BACKGROUND

VNG.co LLC (VNG) builds compressed natural gas (CNG) fueling/infrastructure for light and medium duty vehicles. Natural gas vehicles (NGVs) have lower emissions than gasoline-fueled vehicles, and therefore are appealing to environmentally-focused consumers. Most NGVs on the road today are owned by fleets with their own fueling stations outside of gas stations.

VNG wants a revision of the mid-term evaluation (MTE) of light-duty vehicle GHG standards for model years 2022-2025. VNG wants NGVs treated equally with electric vehicles (EVs). Below are VNG's three main asks, in order of priority:

- 1) Restoration of the .15 divisor, which was eliminated for NGVs in 2015
- 2) Eliminating range requirements on bi-fuel NGVs
- 3) Providing incentives to automakers to produce pick-up trucks that run on CNG

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**MEMORANDUM**

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**Natural Gas Vehicles (NGVs):  
The Common Sense Solution  
To Achieving Emissions Reduction Compliance  
At Low Cost and Low Risk**

**NGVs ideally suited to help pickups, light duty trucks reach 2025 emissions goals**

- Light duty trucks face biggest compliance challenge, are critical to Big Three future
- EVs not an option – batteries too expensive, too heavy for larger vehicles
  - NGVs are proven: Ford F150, Chevy Silverado, Dodge Ram

**Correcting NGV incentives is straightforward – and justified**

- No consideration of NGV technology in 2016 Technical Assessment Report despite availability of abundant domestic fuel and vehicle technology
  - Game-changing Renewable Natural Gas (RNG) delivers more than 85% lifecycle emission reductions
- Restore pre-2015 “0.15 divisor” to harmonize EPA with statutory CAFE incentives,
  - Parity with EV incentives: just as EV incentives reflect renewable energy, restoring 0.15 divisor for NGVs would reflect emissions benefits of RNG (85%)
  - Would allow OEMs to easily meet 2025 targets for pickups
- Parity: eliminate arbitrary driving range requirement imposed on bi-fuel NGVs
  - Plug-in hybrids have no requirements despite much shorter electric range
- Provide NGV pickups with same emissions credits as “Strong Hybrids”
  - Eliminate minimum penetration for NGV pickup incentives: NGVs as 10% of all pickups not immediately feasible for alt fuel like natural gas

**Additional opportunity for smarter regulations: encourage retrofits**

- Retrofitting deployed vehicles with natural gas reduces emissions of existing fleet
- Build on NGV retrofit successes in Oklahoma, greatly expand benefits of rules
- Allow converters to receive credits based on vehicle's remaining useful life, sell/transfer to OEMs

*Restoring parity between NGVs and EVs, and between EPA and NHTSA, will provide automakers much-needed compliance flexibility for light trucks and pickups – and by making these changes effective immediately, we can start building this industry today.*

115TH CONGRESS  
2D SESSION

**S.** \_\_\_\_\_

To amend the National Emission Standards Act and title 49, United States Code, to provide economic growth, environmental benefits, energy independence, and consumer choice by stimulating the market for light-duty natural gas vehicles, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

Mr. INHOFE introduced the following bill; which was read twice and referred to the Committee on \_\_\_\_\_

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**A BILL**

To amend the National Emission Standards Act and title 49, United States Code, to provide economic growth, environmental benefits, energy independence, and consumer choice by stimulating the market for light-duty natural gas vehicles, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the "Natural Gas Vehicle  
5 Act of 2018".

1 SEC. 2. REGULATORY PARITY FOR NATURAL GAS VEHI-  
2 CLES.

3 (a) IN GENERAL.—Section 202(a) of the National  
4 Emission Standards Act (42 U.S.C. 7521(a)) is amended  
5 by adding at the end the following:

6 “(7) INCENTIVES FOR NATURAL GAS VEHI-  
7 CLES.—Effective for the model year 2016 and there-  
8 after, the Administrator shall measure the average  
9 carbon-related exhaust emissions of light-duty gas-  
10 eous fuel dedicated automobiles and light-duty gas-  
11 eous fuel dual-fueled automobiles according to the  
12 calculation described in section 600.510-  
13 12(j)(2)(iii)(A) of title 40, Code of Federal Regula-  
14 tions (as in effect on the date of enactment of the  
15 Natural Gas Vehicle Act of 2018).

16 “(8) CARBON DIOXIDE CREDIT.—

17 “(A) IN GENERAL.—The Administrator  
18 shall establish and provide carbon dioxide emis-  
19 sion credits for any full-size light-duty truck  
20 that implements natural gas vehicle technology,  
21 including—

22 “(i) a dedicated natural gas vehicle; or

23 “(ii) a dual-fueled natural gas vehicle.

24 “(B) CREDIT AMOUNT.—A credit under  
25 subparagraph (A) shall be equivalent in value to  
26 a credit available for a full-size truck that is a

1 strong hybrid electric vehicle (as defined in sec-  
2 tion 86.1803-01 of title 40, Code of Federal  
3 Regulations) under section 86.1870-12(a)(2) of  
4 title 40, Code of Federal Regulations (as in ef-  
5 fect on the date of enactment of the Natural  
6 Gas Vehicle Act of 2018).

7 “(C) NO REQUIRED PRODUCTION MIN-  
8 IMUM.—To receive a credit under subparagraph  
9 (A), a manufacturer is not required to produce  
10 a minimum quantity of full-size light-duty  
11 trucks that implement natural gas vehicle tech-  
12 nology in any model year.”.

13 (b) CURRENT REGULATIONS.—Effective beginning  
14 on the date of enactment of this Act, section 600.510-  
15 12(j)(2)(iii)(B) of title 40, Code of Federal Regulations  
16 (as in effect on that date of enactment), shall have no  
17 force or effect.

18 **SEC. 3. DUAL-FUELED NATURAL GAS VEHICLES.**

19 (a) MINIMUM DRIVING RANGES FOR DUAL-FUELED  
20 PASSENGER AUTOMOBILES.—Section 32901(e)(2) of title  
21 49, United States Code, is amended in each of subpara-  
22 graphs (B) and (C) by inserting “or natural gas auto-  
23 mobiles” after “except electric automobiles” each place it  
24 appears.

1 (b) CALCULATION OF FUEL ECONOMY FOR DUAL-  
2 FUELED NATURAL GAS VEHICLES.—

3 (1) IN GENERAL.—Section 202(a) of the Na-  
4 tional Emission Standards Act (42 U.S.C. 7521(a))  
5 (as amended by section 2) is amended by adding at  
6 the end the following:

7 “(9) CALCULATION OF FUEL ECONOMY FOR  
8 DUAL-FUELED NATURAL GAS VEHICLES.—In calcu-  
9 lating the average fuel economy for a natural gas  
10 dual-fueled vehicle when the vehicle is operating on  
11 natural gas, the Administrator shall not impose any  
12 eligibility requirement that is not also imposed on  
13 electric dual-fueled vehicles.”.

14 (2) CURRENT REGULATIONS.—Effective begin-  
15 ning on the date of enactment of this Act, sections  
16 600.510–12(c)(2)(vii)(B) and 600.510–  
17 12(j)(2)(vii)(B) of title 40, Code of Federal Regula-  
18 tions (as in effect on that date of enactment), shall  
19 have no force or effect.

20 (3) LIMIT ON FUTURE REGULATIONS.—The Ad-  
21 ministrator of the Environmental Protection Agency  
22 may not issue a rule that would impose a similar re-  
23 quirement or have the same practical effect as the  
24 regulations referred to in paragraph (2).



**Ex. 4 CBI**

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